

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 2003195973  
PUBLICATION DATE : 11-07-03

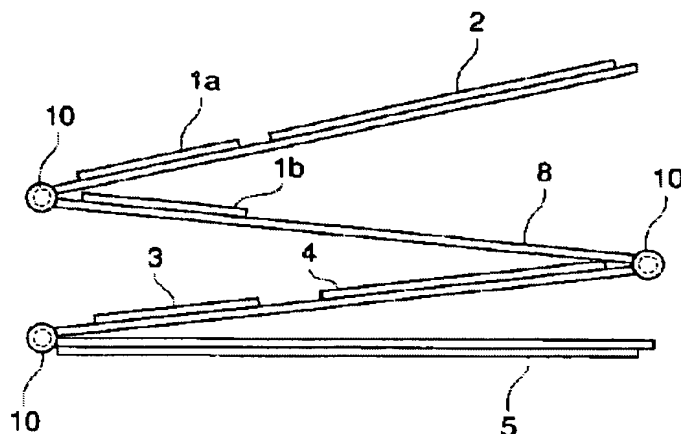
APPLICATION DATE : 21-12-01  
APPLICATION NUMBER : 2001390353

APPLICANT : SHARP CORP;

INVENTOR : KONISHI TAKAO;

INT.CL. : G06F 1/16 G06F 15/02 G06K 19/07  
G06K 19/077 G09F 9/40 H01L 21/288  
H01L 29/786 H01L 51/00

TITLE : SEMICONDUCTOR DEVICE AND  
METHOD OF MANUFACTURE



ABSTRACT : PROBLEM TO BE SOLVED: To provide a semiconductor device superior in convenience in use being foldable in a small shape at carrying time, and expandable in a large shape at using time.

SOLUTION: This semiconductor device is provided with at least one element in element kinds including a recording element for recording data, an operational element for processing the data, a communication element for exchanging the data, an energy element for storing or generating energy, a sensor element for converting information into storable or communicable data by detecting the external information, and a display element for displaying the data. At least one of the provided elements has a bending part composed of a flexible material, and can be folded up thereby.

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PUBLICATION NUMBER : 09311737  
PUBLICATION DATE : 02-12-97

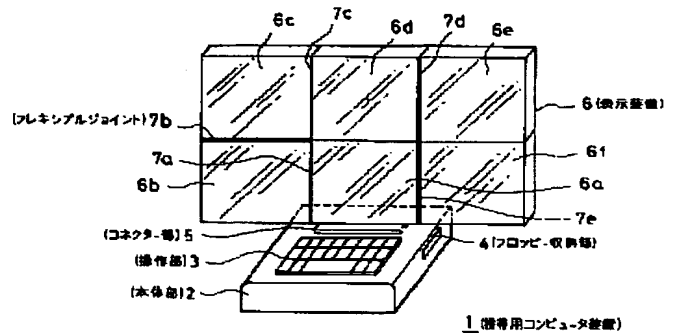
APPLICATION DATE : 24-05-96  
APPLICATION NUMBER : 08151836

APPLICANT : SONY CORP;

INVENTOR : OBA TAKEO;

INT.CL. : G06F 1/16 G06F 15/02 G09F 9/40 //  
G09G 3/18

TITLE : DISPLAY DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To easily view a picture displayed on the display devices of various electronic units which can be carried by users.

SOLUTION: The plural independent display parts 6a-6f and flexible joints 7a-7e connecting the plural display parts 6a-6f are provided. Thus, the plural display parts 6a-6f can be folded by the flexible joints 7a-7e so as to make the device small. One picture can be displayed on the whole display parts 6a-6f and the different pictures can be displayed on the display parts 6a-6f.

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PUBLICATION NUMBER : 10319879  
PUBLICATION DATE : 04-12-98

APPLICATION DATE : 02-12-97  
APPLICATION NUMBER : 09348469

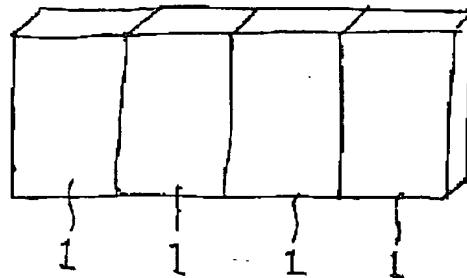
APPLICANT : KUJIRADA MASANOBU;

INVENTOR : KUJIRADA MASANOBU;

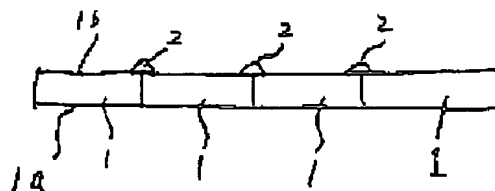
INT.CL. : G09F 9/40 G09F 25/00 H04Q 7/38  
H04M 1/02

TITLE : FOLDABLE DISPLAY DEVICE

(a)



(b)



ABSTRACT : PROBLEM TO BE SOLVED: To provide the foldable display device which can be made much more small-sized than before.

SOLUTION: The foldable display device consists of plane rectangular display panels 1 and connection parts 2 which connect those adjacent panels in a free folding state zigzag when viewed from the top surfaces of the respective panels. Further, this foldable display device features a back-1b side connection part which enables the backs 1b of the panels 1 to be further folded when the panels 1 are folded and a portable telephoned set is fitted on the top surface.

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